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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,535	10/21/2003	Genichi Imamura	15146-007001 / EL:SOT:KSM	9335
26171	7590	11/22/2006	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			KOSTAK, VICTOR R	
			ART UNIT	PAPER NUMBER
			2622	
DATE MAILED: 11/22/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/689,535

Applicant(s)

IMAMURA ET AL.

Examiner

Victor R. Kostak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/21/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/23/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

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1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. and "said **The form and legal phraseology often used in patent claims, such as "means", "should be avoided.** The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The drawings are objected to because Fig. 8 should be labeled as "Prior Art".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

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pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Hara et al.

The video signal monitoring system of Hara (noting particularly Figs. 3 and 7-9) includes an image pickup apparatus (endoscope) 2 with an associated video processor 5. The video signal level (more particularly its color component levels) is calculated by the processor (as well as additional spectral measurements done by stage 56). Monitor 46 receives and visualizes video signal level data and graphics data from the endoscope/processor (noting Fig. 8). Position data (pointer) is generated and transmitted from within by stage 69 processor to monitor 46 (pointer 76: Figs. 8 & 9, col. 7 lines 28-37), thereby meeting claims 11 and 18.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara et al.

Hara visually examines a body cavity and the RGB spectra of the response is monitored and measured for medical diagnosis. The displayed results (Fig. 8) include the cavity image of a specific section 75 and graphic data 77 that indicates the video signal level comprised of the component RGB levels (wavelengths).

Although “decision” data is not explicitly described, it would have been obvious to one of ordinary skill in the art to consider the graphic data 77 as providing additional guidance in diagnosing the patient’s condition to enable subsequent decision making as to treatment.

As for claim 14, the video signal 75 includes the combined levels of the red, green and blue components, and the auxiliary graphic data 77 displays the color spectrum levels as separated red, green and blue component wavelengths.

7. Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara et al. in view of Saito et al.

It would have been obvious to one of ordinary skill in the art to transmit the image/graphic data of Hara by RF communication as taught by Saito (element 78 in Fig. 1) for the benefit of providing remote display without wired connections, thereby meeting claim 12.

As for claim 19, it would also have been obvious to one of ordinary skill in the art to enable object scene enlargement or reduction (e.g. col. 1 lines 8-12 of Saito) to give the operator a more preferred or better perspective of the body are in question, since making an accurate diagnosis is critical.

8. Claims 1, 2, 4-6, 8, 10, 15, 20, 22-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara et al. in view of Tsuji et al.

As noted above, Hara (noting particularly Figs. 3 and 7-9) includes an image pickup apparatus (endoscope) 2 with an associated video processor 5. The video signal level (more particularly its color component levels) is calculated by the processor (as well as additional spectral measurements done by stage 56). Monitor 46 receives and visualizes video signal level data and graphics data from the endoscope/processor (noting Fig. 8). Position data (pointer) is generated and transmitted from within by stage 69 processor to monitor 46 (pointer 76: Figs. 8 & 9, col. 7 lines 28-37).

Hara does not describe in detail the initial imaging procedure beyond preprocessing (Fig. 7 element 60). Nonetheless, it would have been obvious to one of ordinary skill in the art to use any of the common signal formats for transfer/transmission of the color video signal generated by the camera 11, such as sequential RGB, or luminance/color difference format YCrBr or YIQ or YUV such as that used by Tsuji (Fig. 2 stage 16) as so preferred. The eventual received video signal would accordingly be processed using standard reproduction processing for eventual display as a color image, thereby meeting claim 1.

As for claim 2, Hara includes position data (pointer 76) to be combined with the video data for eventual display.

As for claim 4, Hara visually examines a body cavity and the RGB spectra of the response is monitored and measured for medical diagnosis. The displayed results (Fig. 8)

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include the cavity image of a specific section 75 and graphic data 77 that indicates the video signal level comprised of the component RGB levels (wavelengths).

Although “decision” data is not explicitly described, it would have been obvious to one of ordinary skill in the art to consider the graphic data 77 as providing additional guidance in diagnosing the patient’s condition to enable subsequent decision making as to treatment, as explained above.

Regarding claim 5, the video signal 75 includes the combined levels of the red, green and blue components, and the auxiliary graphic data 77 displays the color spectrum levels as separated red, green and blue component wavelengths.

As for claims 6 and 15, it would also have been obvious to one of ordinary skill in the art to represent the displayed video signal in any of its common component groups, such as RGB, YUV, YCrBr or YIQ since they cover the entire signal and are well known parameters that can be derived from a composite color video signal (Hara uses RGB and Tsuji formats luminance and color difference components).

As for claim 8, Hara generates a pointer to identify a specific object scene, which is further represented by the RGB spectrum graph 77, as noted previously.

Considering claims 10, 20, 22-24 and 26, the displayed measured RGB graph 77 is a waveform, which therefore qualifies the measuring instrument as a waveform monitor.

9. Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara et al. in view of Kanno.

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It would have been obvious to one of ordinary skill in the art to transmit/transfer the video imagery to a remote station for the benefit of providing others having interest with the video data without having to be in the immediate vicinity of the single monitor 46, as Kanno expressly discloses the benefit of using a network line for communication (Figs. 1, 2).

Therefore, it would have been further obvious (actually required) to make sure that the image format is compatible with the transmission network.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara et al. in view of Hara et al. and Kanno, in view of Yamaki et al.

It would also have been obvious to one of ordinary skill in the art to enable any viewer any convenient viewing opportunity, such as a PDA, as is taught by Yamaki (Fig. 50, element 3015), which allows ready viewing of the diagnostic procedure without being obtrusive.

11. Claims 7 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara et al. and Tsuji et al., in view of Kanno.

As explained above, it would have been obvious to one of ordinary skill in the art to transmit/transfer the video imagery to a remote station for the benefit of providing others having interest with the video data without having to be in the immediate vicinity of the single monitor 46, as Kanno expressly discloses the benefit of using a network line for communication (Figs. 1, 2). Therefore, it would have been further obvious (actually required) to make sure that the image format is compatible with the transmission network.



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As for claim 25, the displayed measured RGB graph 77 is a waveform, which therefore qualifies the measuring instrument as a waveform monitor.

12. Claims 3, 9, 21 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara et al. and Tsuji et al., in view of Saito et al.

It would have been obvious to one of ordinary skill in the art to transmit the image/graphic data of Hara/Tsuji by RF communication as taught by Saito (element 78 in Fig. 1) for the benefit of providing remote display without wired connections, thereby meeting claim 3.

Regarding claim 9, it would also have been obvious to one of ordinary skill in the art to enable object scene enlargement or reduction (e.g. col. 1 lines 8-12 of Saito) to give the operator a more preferred or better perspective of the body are in question, since making an accurate diagnosis is critical.

As for claims 21 and 27, the displayed measured RGB graph 77 is a waveform, which therefore qualifies the measuring instrument as a waveform monitor.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is (571) 272-7348. The examiner can normally be reached on Monday - Friday from 6:30am-3:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

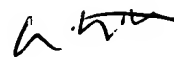
**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**Or faxed to:**

**(571) 273-8300**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is (703) 308-HELP.



Victor R. Kostak  
Primary Examiner  
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VRK